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ABSTRACT

Recent growth of sport psychology research has led to studies of the attitudes of women in sports. Using the Fem Sex Role Inventory and the Sport Competition Anxiety Test with 736 male and female subjects, one study found that: (1) Males with a masculine self description had the lowest levels of sports anxiety; (2) The "feminine" males had a very high level of sports anxiety; and (3) All females, regardless of sex role endorsement, scored at about the same level. Another study of female high school volleyball teams found that, regardless of the subjects' age, sports experience, and team status, masculine characteristics were attributed to both male and female team coaches. Schema theory (a branch of cognitive psychology that accounts for mental structures that represent internalized knowledge and interpretation) can be used to interpret these findings. Since all athletes have learned the ubiquitous schema that sports are masculine, it follows that males with feminine self descriptions would have higher levels of sports anxiety, and that females, conditioned to think of sports as masculine, are all equally anxious to satisfy their sex role schema. This rationale provides some answers for questions about psychological responses to physical education and about students' role expectations for coaches, but more investigation in these areas is needed. (PG)

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Considerations of Sex, Sex Role, and Competition Anxiety

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In the past several years the area of sports psychology has grown more rapidly than anyone might have guessed. Within the last three years there has been a new journal, the Journal of Sports Psychology, started, several large-scale conventions devoted exclusively to sport psychology materials, and a general acceptance by the public of the notion that sports psychology may be a viable entity, as witnessed by the publications of books and magazine articles, and discussions on radio and television talk shows.

In a general sense, sports psychology can be defined as the scientific study of behavior in sports or sport-related situations. but that's probably all the limitation that need be placed on the definition. Sports psychology is for both females and males, for people of all ages, and for all levels of competition from professional, high-powered "play-for-pay" spectator sports to recreational, casual, "pick-up" playground games. The types of research vary from naturalistic observations as they occur in the game setting to laboratory-controlled tests of very specific motor movements.

In the last few years, my particular area of interest has been studying attitudes toward women in sports and attitudes held by women about sport participation. These are the topics I will focus on today, although men will not be slighted entirely.

René Richards to the contrary, it usually is pretty easy to determine any one person's sex. We classify people as either female or male. Sex role, however, is another matter. Regardless of one's actual gender it is possible to

act in whatever manner one chooses to act. Psychologists have been especially interested in this and have devised several means of evaluating sex role.

The one I have chosen to use most often is called the Bem Sex Role Inventory (or BSRI) developed by Sandra Bem (1974) while she was working at Stanford University. She has since gone to Cornell University and continued work in this area and I will be referring to her ideas frequently throughout this talk.

The Bem Sex Role Inventory is really a simple device. There are sixty adjectives or adjective phrases that are presented in twenty groups of three. A masculine, feminine, neutral sequence is used each time. Naturally, the subject is not told this and the phrases are arranged on the page so this is not obvious. The subject is asked to "Describe Yourself" by putting a number beside all choices. The possible responses range from 1, "Never or Almost Never True" through 4, "Occasionally True," which is considered to be a midpoint or average value, to 7, "Always or Almost Always True."

Scoring is simple. All the neutral adjectives are ignored. All the values (or endorsement levels; that is, how much does one endorse the characteristic described?) for the feminine and masculine items are summed and the difference obtained. This value is multiplied by 2.322 to give an approximation of the Student's t value that would be obtained if it were to be calculated. The number obtained is then categorized according to the following set of values (which are based on the normal probability distribution for t): If the value is 2.025 or greater, the person's sex role is classified as feminine, between 2.024 and 1.001, the sex role is called near feminine or tending toward feminine, between -1.001 and -2.024, the sex role is called near masculine or tending toward masculine, and beyond -2.025 as masculine. The range between 1.000 and -1.000 is called androgynous, an adjective that probably needs a little more explanation.

An androgynous sex role implies that the person endorses both feminine and masculine sex roles. (I should note that a small percentage of the population falls in this 1.000 to -1.000 range but has very low values for all the adjectives. Bem describes these people as undifferentiated, but for our purposes we will ignore this distinction today.) Many "feminists" have lobbied for a trend toward androgyny, arguing that any person should be able to endorse any behaviors, either feminine or masculine, without fear of ridicule or embarrassment. Keep this in mind, because it will be important in what I have to report later.

By using this quite simple technique, it is possible to get an estimation of a person's sex role endorsement. But, what about competition anxiety?

Several years ago, Rainer Martens of the University of Illinois published a small book devoted exclusively to a test he and his colleagues devised called the Sport Competition Anxiety Test (or SCAT) (Martens, 1977). Again, this is a simple device to use. The subject is given one page, with a few directions and then fifteen statements to which the responses "Hardly-Ever," "Sometimes," or "Often" can be given.

Scoring here is even easier than with the BSRI. Five of the items are "filler" items and not scored at all. The other 10 are scored on a 3-2-1 basis and the sum of the 10 scored items is determined. This sum is the SCAT score and considered to measure the "predisposition to respond with varying levels of (anxiety) in competitive sports situations."

I suspect that by now you have figured out the kind of research I have been doing. Over the past several years, helped by many of my students (e.g., Wark and Wittig, 1979, Wittig, in press) I have administered both of these scales. I will summarize our work by presenting one global report of the results that typifies what we have found (See Figure 1.). These results are

based on usable responses from 736 subjects (481 females and 255 males).

I think you can see quite quickly that competition anxiety scores obtained for females and those for males do not show the same pattern. But just what do they show? Well, first they show that "feminine" males have very high levels of sport competition anxiety. With a possible range of scores from 10 to 30, this group averages almost 27. Secondly, the "masculine" males have the lowest levels of anxiety. And third, and perhaps most interestingly, the females, regardless of sex role endorsement, all score about the same.

Statistically, the feminine males are significantly more anxious than all but one of the other nine groups (the males who are near feminine), the masculine males are significantly less anxious than all but two of the groups, and none of the female groups differs significantly from any one of the other female groups.

Before I give you my interpretation of these results, let me quickly report a couple of other studies we have conducted. One is fairly old (Wittig, 1975), while the other is a preliminary study I hope to expand upon in the near future (Wittig and Falls, Note 1).

The first involved creating research about sports situations patterned after the Fear of Success research done by Matina Horner (e.g., 1970) while she was at the University of Michigan. Horner presented partial descriptions of individuals to college students (After first-term finals, Anne (John) finds herself (himself) at the top of her (his) medical school class) and asked the students to write descriptions of the people portrayed. The results indicated that males writing about John created many more favorable descriptions than did women writing about Anne.

We wanted to know how students would describe sports participants. We created descriptions of both men and women in comparable sports situations, then asked the subjects to write descriptions of the behavior and appearance of the person. What we found, in general, was that males did not give very positive descriptions of females who participated in sports, especially if the female seemed to "invade" a previously all-male domain. Indeed, as we quickly found, some of the responses were really quite bizarre!

In the second, we modified the BSRI. Instead of having the subjects describe themselves, the instructions asked them to "Describe a Coach." The subjects in this case were 86 female high school volleyball players from 10 nearby schools. We were fortunate that 5 schools had male head coaches while 5 had females, and 5 each had winning and losing records.

What we found was that regardless of whether the players came from winning or losing teams, had experience in other sports or not, or were freshmen, sophomores, juniors, or seniors, they described coaches with generally masculine characteristics. In fact, of the 86 players, 60 described a coach as masculine, 12 as near masculine, and 14 as androgynous. There were no responses classified as near feminine or feminine.

It is interesting to note however that there was a small, but statistically significant difference between players from teams with a male coach and those with a female coach, with the latter being more likely to describe a coach as androgynous--that is, having both feminine and masculine characteristics. When we looked at the specific response patterns, we found that players who had had a male coach showed significantly higher values for the categories "Masculine, Athletic, Childlike, Competitive, and Ambitious" while players who had had a

female coach showed significantly higher values for "Feminine, Affectionate, and Flatterable."

Now the question is--what to make of all of this? In a branch of my discipline called cognitive psychology there has been extensive work on what is called schema theory. Essentially, a schema can be thought of as a generalized knowledge about events, situations, or objects. In other words, schemata are mental structures that represent our internalized knowledges or interpretations of the world around us. They are ways to group information, and, as a result, ways to plan for the future.

Sandra Bem (1981) has used this general theory to apply directly to sex roles. She suggests that experiences in society as we know it force us to adopt certain expectations and interpretations of appropriate gender-related behaviors. Some of this is both obvious and functional--the most compelling example being that of child-bearing. But much of this is stereotypically set without any necessary link to function or body structure. Bem points out, for example, that ". . . Adults in the child's world rarely notice or remark upon how strong a little girl is becoming or how nurturant a little boy is becoming, despite their readiness to note precisely these attributes in the 'appropriate' sex" (1981, p. 355). And maybe Marie Hart expressed it even more forcefully in a Psychology Today article a number of years ago when she wrote:

Sport standards are male and the woman in sport is compared with men--not with other women. It starts early: Wow, what a beautiful throw. You've got an arm like a guy. Look at that girl run; she could beat a lot of boys. Father comments, Yes, she loves sports. She's our little tomboy. It would seem strange to say of a small boy, Oh, Yes, he is our little marygirl. (Hart, 1971, p. 66).

This is really my point. I am convinced that all our athletes, both female and male, are raised learning the ubiquitous schema that sports are masculine. This extends to every aspect of sports--successful participants, successful coaches, socially acceptable behaviors. All require masculine activity for sports.

Now, if we return to the results I showed you before (See Figure 1) and interpret them according to this broadbased sports schema, I think they make a lot of sense. Why do masculine males show the least sports competition anxiety? Because they are absolutely in keeping with the expectations of society. And why are the feminine males so anxious? Obviously because they are so far from where they ought to be.

But, what about the females? My suspicion is that regardless of the sex role any female endorses, the social norms of the peer groups (or reference groups) are stronger determinants of social attitudes than are the individual personality dimensions. In other words, females, regardless of sex role, while growing up have learned a social schema that says sports are masculine. Perhaps sports are reasonable for girls, but certainly they are not intended to be in the "mainstream" of girls' behaviors. In effect, the females are all equally anxious because they are satisfying a schema they learned many years ago and one I contend still holds today.

If you can accept this premise, it becomes easy to understand why males do not like females "invading" the (socially approved and supposedly male-appropriate) sports domain. It is also easy to understand why the female volleyball players would describe a coach as masculine. A coach is supposed to be masculine, regardless of actual gender or any other factor. The schema is truly ubiquitous!

Lest you think this is just Wittig's research and that there probably is nothing else to support such ideas, let me quickly report three examples of others' research. In one, when boys and girls competed in either same-sex or cross-sex motor maze situations that were rigged as to outcome, boys beaten by other boys attributed this result to their opponents' skill. But when beaten by girls, there was a significantly reduced tendency to make this same kind of attribution. The author of this study referred to this as the result of sex role stereotypes and described the result as representative of distorted causal reasoning (Iso-Ahola, 1979).

In a second study, the author reported 44 cases of what was called "athlete's neurosis." This was the term used to describe personality problems experienced by fitness addicts in their 40s who suddenly find their abilities waning and are simply unable to cope with this. All 44 cases were men (Little, 1979).

And in the third, George Sage presented six statements about victory (or winning) to both female and male athletes. For all six items, there were statistically significant differences showing males to have higher levels of victory orientation than did females (Sage, 1980). I would submit that all of these studies (and many more I have not reported) support my contention of a gender-related sports schema.

Finally, the last questions to answer are: So what? Of what importance is all of this? What can someone take away from this paper? I think there are at least three possible answers to these questions.

The first is that, if nothing else, you may develop growing recognition of the differences in athletes that result from psychological rather than physiological variables. If we return to the theme of this whole program--"Let's

Get Physical, It's Healthy" (IAHPERD Fall Conference, West Lafayette, IN, October, 1981)--you can recognize getting physical probably is easier for some people than it is for others.

A second answer is that those of you who are teachers and coaches may have to consider the role expectations that students and players have of you and that you might have of them. As we learn more and more about sports psychology, we see that it is impossible to adopt a single way of teaching or coaching. Teachers and coaches today should try to be part actor, part guidance counselor, part disciplinarian, and maybe all chameleon--able to adjust to each role as the situation demands. They need to assess variables such as anxiety, sex role, social background and the like to try to maximize each person's performance.

And last, but in my opinion, perhaps as important as either of the first two answers, I would hope many would develop a strong desire to start some research on similar topics. In sports psychology, we need many more investigators conducting many more studies with many different populations if we ever hope to have anywhere near enough knowledge to truly influence the areas of physical education, recreation, or sports. The growing recognition and the considerations I spoke of above probably will depend on this.

Note

1. Wittig, A.F. and Falls, R.J. Effect of socialization experience on gender-based schema in competitive sports. Unpublished manuscript.

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